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LWD/WS PROJECTS SAFETY BASIS MANUAL

DOCUMENT:

WSRC-IM-94-10

REVISION:

362

TITLE:

LWD/WS PROJECTS SAFETY BASIS MANUAL

APPROVALS a

| 1 // | | |
|---|----------|---------------------|
| | | dalar |
| J. P. Schwenker, Salety Doorphent Manager, LWD Projects | DATE: | 3/3/03 |
| JB JAA | DATE: | 3/3/05 |
| D. B. Little, Object Engineer, LWD Projects | DATE: | 3/3/05 |
| S. W. Wilkerson, Manager, F Tank Farm Facility | DATE: | 3/3/05 |
| W. C. Clark, Manager, H Tank Farm Facility | D/ 11 L. | - ' |

a Revision 355 represents full approval by appropriate LWD/WS management. Revision 362 has been approved by the affected Safety Document Manager, Chief Engineer and appropriate Facility Manager or designee in accordance with Section 1.0 of this manual.



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REVISIONS

Revisions 1 through 315 covering the period 7/20/94 through 3/31/03 are summarized in letter WSMS-LIC-03-0030 and are available on SafetyNet. Copies of these revisions are available in Document Control.

| Revision | Affected Section(s) | Description of Revision | Date |
|----------|---|--|----------|
| 316 | ALL Sections | Revised ALL Sections WSMS-LIC-03-0034 | 4/07/03 |
| 317 | Title Page Approvers, Revisions, Section 3.0 | Revised Section 3.0 WSMS-LIC-03-0035 | 5/08/03 |
| 318 | Title Page Approvers, Revisions, Section 3.0 | Revised Section 3.0 WSMS-LIC-03-0036 | 5/23/03 |
| 319 | Title Page Approvers, Revisions, Section 3.0 | Revised Section 3.0 WSMS-LIC-03-0106 | 5/28/03 |
| 320 | Approvals, Revisions, Preface, Sections 1.0, 4.0, and 5.0 | Added Sections for Saltstone and ETF WSMS-LIC-03-0037 | 5/29/03 |
| 321 | Title Page Approvers, Revisions, Section 3.0 | Revised Section 3.0 WSMS-LIC-03-0038 | 6/11/03 |
| 322 | Approvals, Revisions, Section 3.0 | Revised Section 3.0 WSMS-LIC-03-0039 | 6/13/03 |
| 323 | Approvals, Revisions, Section 3.0 | Revised Section 3.0 WSMS-LIC-03-0040 | 6/17/03 |
| 324 | Approvals, Revisions, Preface, Sections 2.0, 3.0, 5.0 and 6.0 | Revised Sections 2.0, 3.0, and 5.0 Added Section 6.0 for CIF WSMS-LIC-03-0041 and CBU-WSE-2003-00137 | 7/30/03 |
| 325 | Approvals, Revisions, Contents, Section 3.0 | Revised Section 3.0 WSMS-LIC-03-0044 | 8/28/03 |
| 326 | Approvals, Revisions, Contents, Section 3.0 | Revised Section 3.0 WSMS-LIC-03-0042 | 9/02/03 |
| 327 | Approvals, Revisions, Contents, Section 4.0 | Revised Section 4.0 WSMS-LIC-03-0045 | 9/11/03 |
| 328 | Approvals, Revisions, Contents, Section 3.0 | Revised Section 3.0 WSMS-LIC-03-0162 | 9/12/03 |
| 329 | Approvals, Revisions, Contents, Section 3.0 | Revised Section 3.0 WSMS-LIC-03-0163 | 9/15/03 |
| 330 | Approvals, Revisions, Contents, Section 3.0 and 4.0 | Revised Section 3.0 and 4.0 WSMS-LIC-03-0165 WSMS-LIC-03-0167 | 9/24/03 |
| 331 | Approvals, Revisions, Contents, Sections 2.0, 3.0 and 5.0 | Revised Sections 2.0, 3.0 and 5.0 WSMS-LIC-03-0175 WSMS-LIC-03-0176 CBU-2003-00177 | 10/20/03 |
| 332 | Approvals, Revisions, Contents, Section 3.0 | Revised Section 3.0 WSMS-LIC-03-0181 | 11/04/03 |

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|--------------|-----------------------|-----------------------------|-------------------|--|
| 333 | Approvals, Revisions, | Revised Section 2.0 | 11/21/03 | |
| | Contents, Section 2.0 | CBU-WSE-2003-00212 | | |
| 334 | Approvals, Revisions, | Revised Section 3.0 | 12/05/03 | |
| | Contents, Section 3.0 | WSMS-LIC-03-0194 | | |
| 335 | Approvals, Revisions, | Revised Section 3.0 | 12/17/03 | |
| | Contents, Section 3.0 | WSMS-LIC-03-0199 | | |
| 336 | Approvals, Revisions, | Revised Section 2.0 | 12/19/03 | |
| | Contents, Section 2.0 | CBU-WSE-2003-00234 | | |
| 337 | Approvals, Revisions, | Revised Section 3.0 | 1/08/04 | |
| | Contents, Section 3.0 | WSMS-LIC-04-0002 | | |
| 338 | Approvals, Revisions, | Revised Section 2.0 and 3.0 | 1/20/04 | |
| | Contents, Section 2.0 | WSMS-LIC-04-0010 | | |
| | and 3.0 | CBU-WSE-2004-00012 | | |
| 339 | Approvals, Revisions, | Revised Section 3.0 | ction 3.0 1/22/04 | |
| | Contents, Section 3.0 | WSMS-LIC-04-0012 | | |
| 340 | Approvals, Revisions, | Revised Section 3.0 | 2/5/04 | |
| | Contents, Section 3.0 | WSMS-LIC-04-0016 | | |
| 341 | Approvals, Revisions, | Revised Section 2.0 and 3.0 | 2/10/04 | |
| | Contents, Section 2.0 | CBU-WSE-2004-00026 | | |
| | and 3.0 | WSMS-LIC-04-0017 | | |
| 342 | Approvals, Revisions, | Revised Section 3.0 | 2/18/04 | |
| | Contents, Section 3.0 | WSMS-LIC-04-0019 | | |
| 343 | Approvals, Revisions, | Revised Section 2.0 | 3/12/04 | |
| | Contents, Section 2.0 | CBU-WSE-2004-00042 | | |
| 344 | Approvals, Revisions, | Revised Section 2.0 | 4/14/04 | |
| | Contents, Section 2.0 | CBU-WSE-2004-00056 | | |
| 345 | Approvals, Revisions, | Revised Section 3.0 4 | | |
| | Contents, Section 3.0 | WSMS-LIC-04-0046 | | |
| 346 | Approvals, Revisions, | Revised Section 3.0 | | |
| | Contents, Section 3.0 | WSMS-LIC-04-0058 | | |
| 347 | Approvals, Revisions, | Revised Section 3.0 | | |
| | Contents, Section 3.0 | WSMS-LIC-04-0069 | | |
| 348 | Approvals, Revisions, | . Revised Section 3.0 6/ | | |
| | Contents, Section 3.0 | WSMS-LIC-04-0072 | | |
| 349 | Approvals, Revisions, | Revised Section 3.0 | 6/28/04 | |
| | Contents, Section 3.0 | WSMS-LIC-04-0077 | | |
| 350 | Approvals, Revisions, | Revised Section 2.0 | 6/30/04 | |
| | Contents, Section 2.0 | CBU-WSE-2004-00108 | | |
| 351 | Approvals, Revisions, | Revised Section 2.0 and 3.0 | 8/2/04 | |
| | Contents, Section 2.0 | CBU-WSE-2004-00129 | | |
| | and 3.0 | WSMS-LIC-04-0099 | | |
| 352 | Approvals, Revisions, | | | |
| | Contents, Section 2.0 | CBU-WSE-2004-00141 | 8/9/04 | |
| 353 | Approvals, Revisions, | Revised Section 2.0 | 9/9/04 | |
| - | Contents, Section 2.0 | CBU-WSE-2004-00164 | 3, 2, 2 | |
| 354 | Approvals, Revisions, | Revised Section 3.0 | 10/14/04 | |
| | Contents, Section 3.0 | WSMS-LIC-04-0125 | . 5,, 5 | |

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| Revision | Affected Section(s) | Description of Revision | Date |
|----------|---|--|----------|
| 355 | Approvals, Revisions, Preface, Contents, Section 1.0, 2.0, 4.0 and 5.0 | Revised Section 1.0 for new approvals; revised Section 2.0 to add ABD-DW-04-002; revised Section 4.0 to add Saltstone DSA, Rev. 2; revised Section 5.0 for ASA revision. | 11/16/04 |
| 356 | Approvals, Revisions, Contents, Section 3.0, | Revised Section 3.0 to add CRF- 04007 (Hg Mods) and 04010 (Rewet Tank 12) to Subsection 1.0. | 12/9/04 |
| 357 | Approvals, Revisions, Contents, Section 4.0 | Revised Section 4.0 to revise DSA to Rev. 2 | 12/20/04 |
| 358 | Approvals, Revisions, Contents, Section 2.0 | Revised Section 2.0 to reflect DOE approval of ABD-DW-04-002 and deletion of JCO | 12/22/04 |
| 359 | Approvals, Revisions, Contents, Section 3.0 Revised Section 3.0 to incorporate TSR Rev. 8 and JCO Rev. 2, to delete TSR revisions 2004-A, 2004-B, CRFs 04002 and 04003 and move CRFs 04005 and 04011 to Subsection 1.0 | | 1/04/05 |
| 360 | Approvals, Revisions, Contents, Section 3.0 to add TSR Change 2004-C and DSA Rev. 3 (Annual update) to Subsection 2.0 | | 1/06/05 |
| 361 | Approvals, Revisions, Contents, Section 3.0 | Revised Section 3.0 to add TSR Change 2005-A and 2005-B | 2/28/05 |
| 362 | Approvals, Revisions, Contents, Section 3.0 | Revised Section 3.0 to add CRF 05001 | 3/3/05 |

Section: Preface, Rev. 8

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PREFACE

The facility-specific Safety Basis (SB) Lists contained herein (Sections 2.0 through 6.0) are used as the basis for performing the Unreviewed Safety Question (USQ) process per 10CFR830, Subpart B (Ref. 1) and WSRC Manual 11Q, Procedure 1.05 (Ref. 2). The SB Lists are developed and maintained in accordance with WSRC Manual 11Q, Procedure 1.02 (Ref. 3). DOE and WSRC have formally identified documents on these lists as Safety Basis Documents.

<u>Safety Basis Documents</u> as defined in 10CFR830 Subpart B and Manual 11Q, are the documented safety analysis and hazard controls that provide reasonable assurance that a DOE nuclear facility can be operated safely in a manner that adequately protects workers, the public, and the environment.

For Concentration, Storage, and Transfer Facilities (CSTF), Defense Waste Processing Facility (DWPF), Saltstone Facility, Effluent Treatment Facility (ETF), and Consolidated Incineration Facility (CIF) the "Safety Basis" is defined by the following documents for any given facility:

- 1. DOE approved Documented Safety Analysis (DSA)
- 2. DOE approved Technical Safety Requirements (TSRs)
- 3. DOE approved Justification for Continued Operation (JCO) or Basis for Interim Operation (BIO)
- 4. WSRC approved and implemented Safety Basis Document Change Request Packages not requiring DOE approval or those that have been approved by DOE and implemented by WSRC
- 5. Other documents that DOE has formally identified as Safety Basis Documents

<u>Configuration Managed Documents</u> shall be reviewed during the USQ process to maintain configuration management for pending Change Request Packages, open PISAs and for documents significant to the configuration management of Safety Basis controls.

<u>Categorical Exclusions</u> provide a basis and mechanism for exempting certain Proposed Activities (PA) from the USQ process.

<u>TSR Interpretations</u> are listed for information and provide clarifying information on specific portions of the TSR per S4, ENG.16 (Ref. 4).

Safety Basis documents in this manual will be updated when a significant piece of Safety Basis documentation such as a DSA, TSR, or BIO has been revised or identified for use. The update process is described in Section 1.0. The Document Control process provides the method for keeping the Safety Basis Manual current.

References

- 1. 10CFR830, Subpart B, Safety Basis Requirements
- 2. WSRC Manual 11Q, Procedure 1.05, Nuclear Facility Unreviewed Safety Questions
- 3. WSRC Manual 11Q, Procedure 1.02, Development and Control of Safety Basis Document Lists
- 4. S4 Manual, Procedure ENG.16, Safety Requirement Interpretations

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SAFETY BASIS MANUAL CHANGE PROCESS

INSTRUCTIONS: The responsible Safety Document Manager (SDM) for a facility or designee shall initiate necessary changes to the Safety Basis (SB) Manual.

- 1. The responsible SDM or designee shall prepare the SB Manual revision
 - Note: Per Manual 11Q Procedure 1.02, Rev. 2, the Regulatory Programs Manager or designee is responsible for updating, approving and controlling a revision to this manual. For the Closure Business Unit (CBU), the Regulatory Programs Manager has designated his authority for updating, approving and controlling revisions to the "LWD/WS Projects Safety Basis Manual" to the respective LWD or WS Chief Engineer.
- 2. The responsible SDM or designee shall sign the SB Manual revision, recommending the changes to the SB List(s) to the responsible Chief Engineer(s) and Facility Manager(s) or designee(s) for their approval. If the Preface Section or Section 1.0 is being revised, both Chief Engineers and all Facility Managers or their designees must approve the change.
- 3. The responsible SDM or designee shall transmit the approved SB Manual Change to Document Control and ensure that the change is incorporated in the electronic version (SafetyNet) of the SB Manual.

WSRC-IM-94-10 Section: 2.0, Rev. 85 Date: 12/22/04

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Defense Waste Processing Facility (DWPF)

1.0 SAFETY BASIS DOCUMENTS:

WSRC-TS-95-0019/S-TSR-S-00001, Rev. 29, July 2004, "Technical Safety Requirements Defense Waste Processing Facility."

WSRC-SA-6, Rev. 22, July 2004, "Final Safety Analysis Report Savannah River Site Defense Waste Processing Facility."

SB Document Change Request Packages:

Note: These are SB Document Change Request Packages that have been approved by the FOSC, implemented, but have not been incorporated into the affected document. Copies of these packages are contained in WSRC-IM-2002-00006.

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ABD-DW-04-002, Melter Glass Pump

2.0 CONFIGURATION MANAGED DOCUMENTS:

Note: These are SB Documents/Change Request Packages that have been approved by the FOSC but have not been implemented or are pending DOE approval. Copies of these documents/packages are contained in WSRC-IM-2002-00006.

None

3.0 CATEGORICAL EXCLUSIONS:

None

4.0 TSR INTERPRETATIONS:

Note: TSR Interpretations are NOT SB documents and are for information only.

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Concentration, Storage, and Transfer Facilities (CSTF)

1.0 SAFETY BASIS DOCUMENTS:

WSRC-SA-2002-00007, Rev. 2, December 2003, "Concentration, Storage, and Transfer Facilities Documented Safety Analysis."

S-TSR-G-00001, Rev. 8, January 2005, "Concentration, Storage, and Transfer Facilities Technical Safety Requirements."

WSRC-TR-2003-00083, Rev. 2, October 2004, "Concentration, Storage, and Transfer Facilities Justification for Continued Operations." (Copy is contained in WSRC-IM-99-00034)

SB Document Change Request Packages:

Note: These are SB Document Change Request Packages that have been approved by the FOSC, implemented, but have not been incorporated into the affected document.

Copies of the CRFs are contained in WSRC-IM-99-00009

HLW-CRF-04004 (6/24/04) (Change to WSRC-SA-2002-00007), Chapter 6)

HLW-CRF-04005 (6/7/04) (Change to WSRC-SA-2002-00007, Chapter 1, 2, 3, 4, 5 and 9)

HLW-CRF-04006 (5/13/04) (Change to WSRC-SA-2002-00007, Chapter 11 and 12)

HLW-CRF-04007 (5/7/04) (Change to WSRC-SA-2002-00007, Chapter 2 and 3

HLW-CRF-04008 (10/14/04) (Change to WSRC-SA-2002-00007, Chapter 2, 3, 9 and 13)

HLW-CRF-04010 (12/8/04) (Change to WSRC-SA-2002-00007, Chapter 3)

HLW-CRF-04011 (10/12/04) (Change to WSRC-SA-2002-00007, Chapter 3, 4 and 5)

2.0 CONFIGURATION MANAGED DOCUMENTS:

WSRC-SA-2002-00007, Rev. 3, December 2004, "Concentration, Storage, and Transfer Facilities Documented Safety Analysis." (Copy is contained in WSRC-IM-99-00009) (Annual Update)

S-TSR-G-00001, Rev. 2004-C, Date TBD, "Concentration, Storage, and Transfer Facilities Technical Safety Requirements." (Copy is contained in WSRC-IM-99-00009) (Annual Update)

S-TSR-G-00001, Rev. 2005-A, Date TBD, "Concentration, Storage, and Transfer Facilities Technical Safety Requirements." (Copy is contained in WSRC-IM-99-00009) (Incorporate Tank 40 Purge Ventilation Setpoint)

S-TSR-G-00001, Rev. 2005-B, Date TBD, "Concentration, Storage, and Transfer Facilities Technical Safety Requirements." (Copy is contained in WSRC-IM-99-00009) (Incorporate Tank 51 Purge Ventilation Setpoint)

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SB Document Change Request Packages:

Note: These are SB Document Change Request Packages that have been approved by the FOSC but have not been implemented or incorporated into the affected documents.

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Copies of the CRFs are contained in WSRC-IM-99-00009

HLW-CRF-05001 (3/1/05) (Change to WSRC-SA-2002-00007, Chapter 6)

Unreviewed Safety Question Evaluations:

Note: Copies and a list of the USQEs are contained in WSRC-IM-99-00034.

These are USQEs that have been approved by the FOSC since the last DSA Annual Update.

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3.0 CATEGORICAL EXCLUSIONS:

TRC-HTF-2003-00136, Rev. 1, May 2004, "Categorical Exclusion for Periodic Operational Impacts from Corrosion Control, Flammability Control and Sludge Carryover Minimization Program." (Copy is contained in WSRC-IM-99-00034)

4.0 TSR INTERPRETATIONS:

WSRC-IM-94-10 Section: 4.0, Rev. 89

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Saltstone Facility

1.0 SAFETY BASIS DOCUMENTS:

S-TSR-Z-00002, Rev. 1, August 2003, "Saltstone Facility Technical Safety Requirements."

WSRC-SA-2003-00001, Rev. 2, November 2004, "Saltstone Facility Documented Safety Analysis."

SB Document Change Request Packages:

Note: These are SB Document Change Request Packages that have been approved by the FOSC, implemented, but have not been incorporated into the affected document.

None

2.0 CONFIGURATION MANAGED DOCUMENTS:

None

SB Document Change Request Packages:

Note: These are SB Document Change Request Packages that have been approved by the FOSC but have not been implemented or incorporated into the affected documents.

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None

3.0 CATEGORICAL EXCLUSIONS:

None

4.0 TSR INTERPRETATIONS:

WSRC-IM-94-10 Section: 5.0, Rev. 95

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Effluent Treatment Facility

1.0 SAFETY BASIS DOCUMENTS:

WSRC-TR-98-00379, Rev. 8, October 2004, "Auditable Safety Analysis for the Effluent Treatment | Facility."

SB Document Change Request Packages:

Note: These are SB Document Change Request Packages that have been approved by the FOSC, implemented, but have not been incorporated into the affected document.

None

2.0 CONFIGURATION MANAGED DOCUMENTS:

None

SB Document Change Request Packages:

Note: These are SB Document Change Request Packages that have been approved by the FOSC but have not been implemented or incorporated into the affected documents.

None

3.0 CATEGORICAL EXCLUSIONS:

MSB-ETP-2004-062, Rev. 0, November 2004, "Categorical Exclusion for Rev. 8 of the ETF ASA."

4.0 TSR INTERPRETATIONS:

WSRC-IM-94-10 Section: 6.0, Rev. 0 Date: 7/30/03

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Consolidated Incineration Facility

1. SAFETY BASIS DOCUMENTS:

WSRC-TR-96-0212, Rev. 2, September 29, 1999, "Auditable Safety Analysis, Savannah River Site, Consolidated Incineration Facility."

SB Document Change Request Packages:

Note: These are SB Document Change Request Packages that have been approved by the FOSC, implemented, but have not been incorporated into the affected document.

S-DCF-H-00060, (2/17/00) (Change to WSRC-TR-96-0212) S-DCF-H-00067, (8/01/00) (Change to WSRC-TR-96-0212) S-DCF-H-00069, (8/01/00) (Change to WSRC-TR-96-0212)

2. CONFIGURATION MANAGED DOCUMENTS:

None

SB Document Change Request Packages:

Note: These are SB Document Change Request Packages that have been approved by the FOSC but have not been implemented or incorporated into the affected documents.

None

3. CATEGORICAL EXCLUSIONS:

None

4. TSR INTERPRETATIONS: